

Statement of Work

1. Scope:

NRL SEALAB conducts applied research, development, and demonstrations of innovative technologies leading to enhanced utility of remote sensing systems. The Expanded Maritime Processor (EMP) project will develop a maritime-focused image processor that supports Navy Maritime Domain Awareness (MDA) Missions. This project proposes leveraging an existing processor to improve performance over maritime environments. The General Dynamics – Advanced Information Systems (GDAIS) (the Contractor) shall modify the Sensor Specific Processor (SSP) to optimize configurations for addressing maritime issues in support of NRL EMP project.

2. Purpose:

Provide software development support to NRL SEALAB, COR Dr. Ralph Fiedler.
Period of Performance: 01 Jan 2014 – 31 Dec 2014

3. Management:

NRL SEALAB will provide direction to the contractor on specific initiatives and events where support is required.

4. Tasks Description:

The Contractor shall adapt the SSP and tailor it for the maritime domain, focusing on data processing with a variety of parameters to determine optimal settings. The software shall include the ability to process data up to the TS/SCI level.

4.1 Task 1 Determine Optimal Data Collection Settings

(U) The Contractor shall support NRL assessments of data collection settings for maritime areas to determine optimal configurations.

4.1.1 The Contractor shall process maritime data to facilitate NRL assessment of the impact of various parameters on maritime data.

4.1.2 The Contractor shall assist NRL in developing recommendations to optimize data collection parameters for maritime environment.

4.2 Task 2 Determine Optimal Processing Parameters

(U) The Contractor shall support NRL assessments of processor settings against maritime data collections to determine best processing configurations for the maritime environment.

4.2.1 The Contractor shall assist NRL in evaluating maritime data to assess impact of processor parameters for maritime environment.

4.2.2 The Contractor shall assist NRL in developing recommendations to optimize collection parameters for maritime environment.

4.3 Task 3 Modify SSP Processing for Maritime Environments

The Contractor shall adjust the SSP as required to optimize processing based on assessments of various parameters within the context of the maritime data collection.

4.3.1 The Contractor shall process data to create output products from maritime environment.

4.3.2 The Contractor shall troubleshoot and adapt the product formation process as necessary.

4.3.3 The Contractor shall adjust the SSP as required to optimize processing.

4.3.4 The Contractor shall identify and document all necessary code or configuration changes to be merged into future SSP releases.

4.4 Task 4 Capability Demonstration

The Contractor shall assist NRL in preparing and conducting a demonstration of the capability improvements resulting from applying recommended collection CONOPS, collection parameters and processor settings.

5. Deliverables

5.1 Reports

5.1.1 Deliver periodic reports as required.

5.1.2 Monthly Reports

A monthly status report shall contain information up to the TS/SCI level and be delivered to NRL via secure e-mail channels no later than the 8th of each month. The report shall be in the following format:

- Project Title:
- Month: (Current Month)
- Summary of Activities and Status
- Milestones Completed
- Problem Areas
- Status of Funds: This should include a table and/or graph with the following information: Total Authorized Funding, Total Amount Expended, and the projected monthly spend plan with the corresponding monthly expenditures.

5.1.3 Final Report

Upon program completion, a final report shall be generated and provided to NRL. Contractor format is acceptable. The report shall contain information up to the TS/SCI level and be delivered via appropriate secure channels.

5.2 Reviews/Meetings

5.2.1 Kick off Meeting

The Contractor shall provide material to NRL to support sponsor kick-off briefing.

5.2.2 Technical Exchange Meeting (TEM)

The Contractor shall in person one technical exchange meeting with the Government COTR in the first year. Other TEMs with the Government COTR shall be supported remotely as required.

5.2.3 Closeout Meeting

Upon program completion, the Contractor shall support in person a Final Briefing that shall be prepared and presented to review the results of the program.

5.3 Hardware/Software Deliverables

5.3.1 Expanded Maritime Processor Software (to be included as an update to SSP)

5.4 Training/Manuals

5.4.1 Expanded Maritime Processor Software manual defining parameters.

6. Security

Tasks associated with this SOW require routine access to SCI documents, data and information technology systems. The Contractor Security personnel shall be responsible for all required clearances for Contractor personnel and coordinate access to required SCI facilities and systems. All Contractor personnel shall possess a favorably completed DoD investigation and a final DoD granted Top Secret security clearance and be indoctrinated for SCI access at time of proposal submission. Detailed security requirements are delineated in the issued DD 254 relevant to this contract. The Contractor shall ensure that all classified material is handled in accordance with the issued DD 254, the National Security Program Operating Manual (NISPOM) (DoD 5220.22M and all NRL and applicable Security Program Guides/Directives.

